Appendix N



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Record of Decision

Prime Hook National Wildlife Refuge

Sussex County, Delaware



Record of Decision

for the

Final Comprehensive Conservation Plan and Environmental Impact Statement

U.S. Fish and Wildlife Service



March 2013 Record of Decision

For the

Final Comprehensive Conservation Plan and Environmental Impact Statement

U.S. Department of the Interior, Fish and Wildlife Service

Prime Hook National Wildlife Refuge

Sussex County, Delaware

This Record of Decision (ROD) presents the decision regarding the selection of a Comprehensive Conservation Plan (CCP) for Prime Hook National Wildlife Refuge (NWR). It includes a brief summary of the alternatives considered, public involvement in the decision-making process, and the reasons for selecting alternative B for implementation. The Prime Hook NWR CCP will provide management guidance for conservation of refuge resources and public use activities during the next 15 years.

Alternatives Considered

The U.S. Fish and Wildlife Service (Service) evaluated the following three alternatives contained in the final CCP and Environmental Impact Statement (EIS) for the management of Prime Hook NWR.

Alternative A (Current Management): This "no action" alternative, required by regulations under the National Environmental Policy Act of 1969, would simply extend the way we now manage the refuge over the next 15 years. It also provides a baseline for comparing the two "action" alternatives. Our habitat management program would continue in its present manner, which involves no active management of wetlands due to recent extensive changes along the refuge shoreline, no active forest management, and no agricultural management of upland fields. This means that natural succession would occur in most upland habitats instead of proactive restoration actions, and that natural ecological processes would proceed with no human intervention. In this alternative's scenario, no attempts would be made to manage freshwater impoundments, nor would the refuge conduct any active restoration within impounded wetland areas. In summary, the only habitat manipulation we would continue would be the removal of invasive species and enhancement actions for federally listed endangered and threatened species. We would continue to offer hunting and fishing opportunities on refuge lands, and respond to requests for interpretive and environmental education programs. The refuge would continue to provide 6 miles of walking trails, 7 miles of canoe trails, and associated viewing and photography infrastructures.

Alternative B (Preferred Alternative): This alternative combines actions we believe would best meet the purpose and need for a CCP, most effectively achieve refuge purposes, vision and goals, and respond to public needs. Alternative B also incorporates the principles of strategic habitat conservation and focal species management, as both reflect the most recent advances in the fields of conservation science and delivery of conservation actions on the ground by the Service. Alternative B would include a combination of passive and active management approaches to foster or achieve more ecologically sustainable habitats than occur on the refuge at present. Under alternative B, the refuge would implement management actions that mimic natural processes to enhance habitat restoration where deemed most appropriate. At the same time, the refuge would strategically reduce management actions that detract from the resiliency and sustainability of a healthy system, such as artificial maintenance of extensive freshwater wetlands that are vulnerable to sea level rise. The refuge would also pursue careful sediment placement or marsh restoration to return previously managed wetlands to a natural salt marsh, which will be more sustainable in light of sea level rise. Alternative B would enhance visitor services through a proposed expansion of access facilities and new trails open for wildlife observation, photography, interpretation, environmental education, hunting, and fishing. The hunting program would be modified for greater administrative efficiency. Additional areas of the refuge would be opened for the hunting program, with careful consideration of public safety and balancing this expanded use with other options for non-consumptive wildlife-dependent public uses. With regard to mosquito control, the refuge would continue the use of larvicides, but would only use adulticides when there is a documented human disease threat.

Alternative C (Historic Habitat Management): Alternative C would return to habitat management programs that were conducted on the refuge through most of its existence, but which were stopped in recent years for a variety of reasons (e.g., changes in the environment, court decisions, updates in Service policy). These historic habitat management programs include the use of cooperative farming in upland refuge fields, and management of freshwater wetland impoundments, both originally conducted for the benefit of migratory birds. Under this alternative, the refuge, with partner assistance, would conduct infrastructure and duneline enhancements to

reestablish management of freshwater impoundments. Upland fields previously enrolled in the cooperative farming program would once again be managed through farming practices with the cooperation of local farmers. Alternative C would match alternative B in that initiating adult mosquito control would be triggered by documented mosquito-borne disease activity near the refuge. For visitor services programs and refuge uses, alternative C would expand opportunities for hunting and have a greater emphasis on public outreach and education. Fishing, wildlife observation, and wildlife photography would be similar to alternative A. We would further enhance local community outreach and partnerships, continue to support a Friends Group, and continue to provide valuable volunteer experiences.

In addition to the three alternatives discussed above, we considered four other actions but eliminated them from detailed analysis. These actions were refuge boundary expansion, certain shoreline stabilization techniques, no hunting, and reduced hunting. The full rationale for elimination of alternatives or actions can be found in chapter 4 of the final CCP/EIS.

Environmentally Preferable Alternative

The environmentally preferable alternative is the one which causes the least damage to the biological and physical environment and best protects, preserves, and enhances natural resources. We believe that alternative B, the Service-preferred alternative, is the most environmentally preferable alternative because it would assist in restoring the natural ecological values of Prime Hook's barrier island and salt marsh system and restore the natural hydrological function of these units thus providing valuable ecosystem services such as storm surge and flood protection. Alternative B also includes actively pursuing the largest amount of native reforestation which will increase Delmarva fox squirrel habitat acres and enhance the size of the refuge's population, and expand vital stopover sites and breeding habitat for migratory birds.

Public Involvement and Comments Received

Public comment has been requested, considered, and incorporated throughout the planning process in numerous ways. Public outreach has included open houses, public meetings, technical workshops, planning update mailings, and *Federal Register* notices. Five previous notices were published in the *Federal Register* concerning this CCP/EIS (70 FR 60365, October 17, 2005; 76 FR 26751, May 9, 2011; 77 FR 32131, May 31, 2012; 77 FR 47435, August 8, 2012; and 77 FR 76510, December 28, 2012). Numerous national, State, and local organizations; agencies; neighboring landowners; and interested citizens were involved in the review process. Comments and concerns received early in the planning process were used to identify issues and draft preliminary alternatives. We initially released the draft CCP/EIS for 69 days of public review and comment from May 31 to August 6, 2012. In response to public requests, we extended that period another 20 days, to August 27, 2012. During the draft CCP/EIS comment period, the Service received 106 separate written responses, 18 oral comments from the public meetings, 1,024 copies of a single form letter, and an online petition signed by 522 individuals. All substantive issues raised in the comments on the draft CCP/EIS have been addressed through revisions incorporated into the final CCP/EIS text or responses contained in appendix M of the final CCP/EIS.

Responses to Comments Received On the Final CCP/EIS

The Service issued a final CCP/EIS in December 2012 for a 30-day review period. We received a total of 14 comment letters; however, comments did not raise significant new issues, or result in changes to the analysis, or warrant any further changes to alternative B. All substantive comments were previously addressed in our response to public comments detailed in appendix M of the final CCP/EIS.

The U.S. Environmental Protection Agency stated they have no objection to the project, and recommends the Service to continue to work closely with Federal, State, and local stakeholders throughout implementation of the plan and any adaptive management decisions. The Delaware Department of Natural Resources and Environmental Control (DNREC), through the Delaware Coastal Management Program (DCMP), concurred with the Service's consistency determination that the selected alternative is consistent with the State's enforceable policies. DNREC further requests that the Service work collaboratively with the State to address concerns related to the habitat management, hunting program, and mosquito control aspects of the selected plan.

Decision

The Service has selected alternative B, the Service-preferred alternative specified in the final CCP/EIS for Prime Hook NWR. Alternative B is the most effective alternative at addressing the key issues and concerns identified during the planning process and will best achieve the purpose and need for developing the CCP, the purposes and goals of the refuge, as well as the mission and goals of the National Wildlife Refuge System (Refuge System). Implementation of the CCP will occur over the next 15 years.

Most of the management guidelines and actions in alternative B of the final CCP/EIS remain consistent with those presented in the draft CCP/EIS. The decision includes adoption of stipulations and mitigation measures referenced in the "Measures to Minimize Environmental Harm" section below. The most important modifications to alternative B that were made between draft and final documents in response to public comment are:

- (1) We clarified under alternative B, objectives 1.1 and 3.1 that dune restoration is a potential, and even likely, first step in our proposal to restore marsh habitat. We also reiterated that we would only plan to restore the dunes as part of the comprehensive marsh restoration, not as a separate action.
- (2) We revised the strategies under alternative B, objective 3.1 and our analysis in chapter 5 of the final CCP/EIS to provide some additional analysis of other shoreline modification and wave attenuation strategies, such as living shorelines and wave attenuation structures.
- (3) We modified several hunting strategies to be responsive to public concerns, to be more consistent with State regulations, and to eliminate confusion for hunters and non-hunters alike.
- (4) We revised alternative B, objective 5.1a to no longer propose opening the refuge to white-tailed deer hunting on Prime Hook Creek.
- (5) We revised alternative B, objective 5.1b to allow waterfowl hunting 4 days per week until 3 p.m. in all waterfowl hunting areas to be consistent with State hunting regulations.
- (6) We modified our proposed waterfowl hunting areas under alternative B, objective 5.1b. Open areas now include: Unit I (open to free-roam hunting), Unit III (south of Prime Hook Road-open to free-roam hunting; lottery hunt area that now includes the area south of the Headquarters Ditch), and Unit IV (non-ambulatory wheelchair blind only). Closed areas now include: free-roam hunting along the Broadkill River and hunting west of Foord's Landing on Prime Hook Creek, and the area near Prime Hook Beach for non-ambulatory wheelchair hunters. Non-ambulatory hunters are allowed to hunt in all hunt zones in accordance with refuge policy and regulations. Only non-ambulatory hunters may hunt in the Island Farm Unit, where we have provided non-ambulatory hunt blinds to accommodate hunters with this need.
- (7) We revised alternative B, objective 5.1b to update information on the non-ambulatory waterfowl blinds on the Island Farm Unit. We now propose to issue permits by preseason lottery drawing for first 2 days of each waterfowl season split; days thereafter will be first-come, first-serve.
- (8) We removed the number of proposed waterfowl blind sites under alternative B, objective 5.1b because the habitat is constantly changing. The number of blind sites will be a function of the habitat conditions when the CCP is implemented.
- (9) We revised alternative B, objective 5.1 to permit snow goose conservation hunting in only wetland areas (no conservation order hunting in the uplands).
- (10) We revised alternative B, objective 5.1d to allow turkey hunting until 1 p.m. on the refuge to be consistent with State hunting regulations, and to state that the number of turkey hunting numbers may be increased or decreased from the proposed five hunters based on trends in turkey population data.
- (11) We revised alternative B, objective 5.1 to require that all wheelchair hunters have an assistant.
- (12) We clarified our proposal for red fox hunting under alternative B, objective 5.1c. We propose to offer red fox hunting opportunities concurrent with the deer hunting season. We will not allow chase hunting and will not permit centerfire and rimfire rifles.

- (13) We revised alternative B, goal 5 to continue to allow year-round access to the western 4 miles of Prime Hook Creek for visitors engaged in uses such as wildlife observation, wildlife photography, and fishing.
- (14) We updated alternative B, objective 5.2 to clarify that the number and length of existing and proposed trails will total 14 trails covering 9.9 miles. We also propose to reroute Slaughter Beach Trail due to changes in habitat, and add a new parking area on the existing interior road.
- (15) We revised alternative B, objective 5.3 to allow fishing and crabbing on the pull-offs along Prime Hook Road. We also clarified that the regulations for catch and release and use of barbless hooks will only occur west of Foord's Landing on Prime Hook Creek. These regulations may be revised as fishery population dynamics change.
- (16) We have decided to permit the use of adulticides for mosquito control when there is a documented human disease threat, instead of only when a public health emergency is declared. We modified strategies under alternative B, objectives 1.2 and 1.3 to state that we will allow the use of adulticides on the refuge once the Delaware Mosquito Control Section (DMCS) surveillance program has detected and documented a mosquito-borne human disease threat on or near the refuge.

Factors Considered in Making the Decision

This decision to adopt alternative B for implementation was made after considering the follow factors:

- The impacts identified in Chapter 5, Environmental Consequences, of the draft and final CCP/EIS.
- The results of public and other agency comments.
- How well the alternative achieves the stated purpose and need for a CCP and the six goals presented in the final CCP/EIS chapter 1.
- How well the alternative addresses the relevant issues, concerns, and opportunities identified in the planning process.
- Other relevant factors, including fulfilling the purposes for which the refuge was established, contributing to the mission and goals of the Refuge System, and statutory and regulatory guidance.

Compared to the other two alternatives, alternative B includes the suite of actions that best meet the factors above using the most balanced and integrated approach, and with due consideration for both the biological and human environment. Alternative B will best fulfill the CCP's biological goals, by managing for particular Federal trust species and habitats that are of regional conservation concern. It clearly defines which Federal trust species and habitat will be a management priority in both uplands and wetlands, and details specific objectives and strategies for their management. The refuge's establishment purposes emphasize the conservation of migratory birds; thus, protecting the biological integrity, diversity, and environmental health of Prime Hook NWR and its habitat and wildlife, particularly migratory birds, is paramount.

Future management of Unit III is still tentative until hydrological modeling is completed; however, we believe that our proposal under alternative B to restore refuge impoundments to healthy, brackish marsh and salt marsh will encourage the conditions most resilient to sea level rise, while providing valuable habitat for waterfowl, salt marsh obligate passerines and waterbirds, shorebirds, and other wildlife. Furthermore, restoring salt marsh will provide long-term benefits to neighboring human communities because it can reduce erosion and reduce saltwater intrusion. The freshwater impoundments maintained under alternative C, and the lack of salt marsh protection and restoration under alternative A, would not provide these benefits in a self-sustaining manner over the long-term.

The costs associated with salt marsh restoration were also a consideration. The Service understands that initial up-front planning costs associated with specific strategies of alternative B could be costly, and this amount will be more clearly defined once all monitoring data is collected. However, the total cost of a self-sustaining salt marsh would be minimal when compared to the projected cost of the continuous year-after-year maintenance required in alternative C.

The Service also considered the changes in wildlife and plant communities that would occur under alternative B in comparison to the other two alternatives. Under alternative B, the abundance, distribution, or composition of the refuge's wildlife and plant communities are likely to shift as habitats change to a more natural, self-sustaining salt marsh system. The species characteristic of the freshwater marshes present today, will eventually transition to species that live in native brackish marsh and salt marsh. Allowing passive conversion to salt marsh and open water in refuge coastal wetland habitats as proposed in alternative A, or proactive salt marsh restoration as proposed in alternative B, will both result in emergent wetland vegetation changing from freshwater plants to halophytic (salt tolerant) marsh plants. However, alternative A is likely to result in a system dominated mostly by open water, and thus lacking in salt marsh habitat and the wildlife habitat and ecosystem services it provides. While the resulting salt marsh community may have less plant species diversity, this community type is among the most degraded of all habitats, there has been a substantial amount of salt marsh lost in the mid-Atlantic over the past 200 years, and many species of high conservation concern depend on the salt marsh community.

While alternative C maintains or increases the freshwater wetlands and the wildlife and plant diversity associated with it, the manipulation associated with those freshwater wetlands represent a major impact on local hydrology. These freshwater impoundments also require a major commitment of resources, and are not resilient to climate change impacts. Climate change and accelerated sea level rise have already, and will continue to, inhibit our ability to manage salinity and water levels in our freshwater wetlands and control salinity intrusion into our upland habitats. Even once necessary infrastructure repairs and upgrades are made, impoundment management will be challenging and will contribute to marsh elevational deficiencies within the impounded marsh complex, further altering hydrology. Adverse impacts resulting from the inherent instability of the freshwater impoundments could offset any beneficial impacts considerably. Lost elements of coastal wetland integrity and environmental health of impounded marsh areas due to significant accretion deficiencies indicate that impounding refuge coastal areas cut off sediment supplies needed for marsh platforms to keep up with local sea level rise rates.

In the upland habitats, the diversity of wildlife and plants will increase under alternative B due to the conversion of hundreds of acres of row-cropped agricultural fields to native plant communities, including forest, grassland, and shrubland. For example, it will provide habitat for breeding grassland, shrubland-dependent, or forest-interior dwelling landbird species, and migrating and wintering landbirds. The elimination and restoration of agricultural fields, as proposed under alternative B, is the alternative most consistent with the Service's guidance on maintaining biological diversity, integrity and health on refuges, and the recommendations on managing overabundant populations of light geese. While alternative A also eliminates agricultural fields, active restoration of those lands would not occur. Alternative C would resume the cooperative farming program, although its value as wildlife habitat is limited. The original objective of the agricultural program, to provide food for a diversity of waterfowl, has not been realized. Monitoring has shown that ducks prefer the native forage in the refuge's wetlands.

Under alternative B, there will be an important change to the mosquito control program which will help protect the diversity and abundance of native insects and benefit the migratory birds, bats, and other wildlife that forage on them. The refuge will reduce the application of adulticides and use them only when there is a documented human disease threat. Alternative C would make the same change as alternative B, but alternative A would continue to allow the State to apply adulticides under a wider range of conditions, with the potential for greater impacts to native insect populations.

For visitor services, alternative B will best enhance public use opportunities through a proposed expansion of access facilities and new trails open for wildlife observation, photography, interpretation, environmental education, hunting, and fishing. The hunting program will be modified for greater administrative efficiency. Additional areas of the refuge will be opened for the hunting program, with careful consideration of public safety, staff and resource commitments, and balancing hunting with other wildlife-dependent public use opportunities. The existing hunt program (alternative A) requires extensive staff time and resources. The proposed changes in the hunt program under alternative B will reduce the cost of administering the hunt, reduce the cost to hunters, and be more consistent with State regulations.

In summary, we selected alternative B for implementation because it best meets the factors identified above when compared to alternatives A and C and was identified as the most environmentally preferable alternative. Alternative B provides the greatest number of opportunities for Prime Hook NWR to contribute to the conservation of fish, wildlife, and habitat in the Region, will increase the capacity of the refuge to meet its purposes and contribute to the Refuge System mission, and will provide the means to better respond to changing ecological conditions within the surrounding environment.

Measures to Minimize Environmental Harm

Public concerns, potential impacts, and measures or stipulations to mitigate those impacts are addressed in the final CCP/EIS. All practicable measures to avoid or minimize environmental impacts that could result from implementation of alternative B have been identified and incorporated into chapter 4 (Alternatives), chapter 5 (Environmental Consequences), and appendix E (Compatibility Determinations) (CD) of the final CCP/EIS. The stipulations identified in the CDs in appendix E ensure that public and other uses are compatible with the purposes for which the refuge was established. These CD stipulations and other mitigation measures identified for alternative B in chapters 4 and 5 are adopted by the Service in this ROD and will be followed or enforced by refuge staff or their designee.

Findings Required by Other Laws and Executive Orders.

The final CCP/EIS complies with all Federal laws and Executive Orders (EO) related to the planning process and Prime Hook NWR. These include, but are not limited to, the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105–57); the National Environmental Policy Act of 1969 (Public Law 91-190, as amended); the Endangered Species Act of 1973 (Public Law 93-205, as amended); the National Historic Preservation Act of 1966 (Public Law 89-665); the Coastal Zone Management Act (Public Law 92-583, as amended); EO 12898, Environmental Justice; EO 11988, Floodplain Management; EO 11990, Protection of Wetlands; EO 12372, Intergovernmental Review; EO 13186, Protection of Migratory Birds; and EO 13175, Consultation and Coordination with Indian Tribal Governments.

For Further Information

For further information, contact Refuge Planner Thomas Bonetti, U.S. Fish and Wildlife Service, Northeast Regional Office, 300 Westgate Center Drive, Hadley, Massachusetts, 01035, Phone (413) 253-8307. Copies of the final CCP/EIS and subsequent CCP may be viewed at Prime Hook NWR and at the following libraries in the State of Delaware: Milton Public Library, 121 Union Street, Milton, Delaware, 19968; Milford Public Library, 11 SE Front Street, Milford, Delaware, 19963; and Lewes Public Library, 111 Adams Avenue, Lewes, Delaware, 19958. The final CCP/EIS and this ROD will be available for viewing and downloading online at: http://www.fws.gov/northeast/planning/Prime%20Hook/ccphome.html.

Wendi Weber

Regional Director, Region 5

Date

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